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Remarks

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Restriction Requirement under 35 U.S.C. § 121

The Examiner has required applicant to elect one of Groups I-III under 35 U.S.C. § 121 for examination at this time. Groups I-III are:

- I. Claims 1-3 and 6-9, drawn to method of forming a capstock composite, classified in class 264, subclass 176.1⁻.
- II. Claims 4-5, drawn to method of forming a capstock composition, classified in class 525, subclass 70⁺.
- III. Claim 10-15, drawn to a multilayered polymeric composite, classified in class 428, subclass 500⁺.

During a telephone conference on January 10, 2007, Richard Clikeman, agent for applicant, made provisional election with traverse to prosecute the invention of Group III, claims 10-15. Applicants now affirm this election of Group III.

The Examiner has stated that claims 1-9 are withdrawn. In the event that Group III claims are allowed, Applicants reserve the right to request the Examiner to consider rejoining claims from currently withdrawn groups I and II with Group III claims.

Rejection under 35 U.S.C. § 103(a) over U.S. 5.703,169

The applicant is canceling claim 10, without prejudice. The Examiner has rejected claims 10-15 under 35 U.S.C. § 103(a) as being unpatentable over Zajaczkowski et al. (U.S. 5,703,169), hereafter '169.

The applicant traverses. Patent '169 is directed to an adhesive composition. Claim 1 is explicitly directed to:

"A normally tacky non-polar monomer-containing phase separated graft copolymer having pressure sensitive adhesive properties..." (col. 6, lines 22-23)

The entire focus of '169 is further explicitly stated in the specification:

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"Such materials may be coated in any conventional manner with the adhesive composition of the present invention, such as by roll coating, spray coating.... When appropriate, the composition of the present invention may be applied as a solution and the solvent subsequently removed to leave a tacky adhesive residue on the backing material."

"The coated backing material may take many forms, such as tapes, patches, strips, etc., with the choice and form of backing material being ultimately determined by the end use contemplated." (col. 6, lines 10-20)

The non-polar monomer containing graft copolymer of '169 is tacky. It is applied to a "backing material" for the purpose of being stuck to another material.

The graft copolymer of '169 includes an amount up to about 6.5 weight % of polymeric graft moiety (Tg at least 20 °C). (claim 1, col. 6, lines 47-49) The specification explains further that the polymeric graft moiety is preferably present in an amount of from 1.5 to 2.5 polymeric moieties per polymer backbone on average, thereby assisting in "enabling the copolymer to exhibit sufficient cohesion strength" (col 3, lines 39-50).

Patent '169 goes on to describe the nature of the phase separated adhesive.

"The graft copolymer of the present invention is characterized as being "phase-separated". That is, the backbone of the copolymer and the attached graft are incompatible and thus do not mix together to form a homogeneous phase. Instead, the copolymer backbone forms a continuous phase within which is dispersed the attached graft phase. The dispersed graft discontinuous phase thus acts to mechanically reinforce the continuous phase, thus inhibiting the flow of the continuous phase at an elevated temperature." (col. 3, line 61 to col. 4, line 2)

Patent '169 teaches a continuous phase of the copolymer backbone to assure that the surface of the adhesive residue will be tacky. Very low levels of polymeric graft moiety are used solely to reduce flow of the adhesive.

The present invention claims a graft segment (Tg = 70-180°C) level ranging from 30 to 60 weight % of the comb copolymer; patent '169 discloses 6.5 weight % or less of graft segment having Tg of at least 20 °C. The present invention claims a multi-layered polymeric composite having a capstock layer that inherently does not even pick up dirt, let alone bond to another substrate. If such bonding were to occur it would be impossible to make, stack, and ship siding and window profile. The capstock layer of the present invention is not at all tacky, indicating that the backbone polymer does not constitute a

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sole continuous phase. In fact, the backbone phase is either co-continuous with the graft segment phase, or present as domains within the graft segment phase, both conditions leading to a rigid non-tacky surface.

In conclusion, applicant asserts that one of ordinary skill in the art, upon reading '169, would not be motivated to try, let alone do, the present invention. '169 does not disclose, suggest, or teach the present invention. In fact, '169 teaches away from the present invention by requiring that the graft copolymers having very low levels of high Tg polymeric graft moieties, and by requiring that the graft copolymer be tacky.

Conclusion

Applicant respectfully requests the Examiner to:

- (a) withdraw claims 1-9;
- (b) cancel claim 10, without prejudice; and
- (c) pass Claims 11-15 on to allowance.

Fee Deficiency

If an extension of time is deemed required for consideration of this Amendment, please consider this Amendment to comprise a Petition for such an extension of time; The Commissioner is hereby authorized to charge the fee for such extension to Deposit Account No. 18-1850.

and/or

If any additional fee is deemed required for consideration of this Amendment, the Commissioner is hereby authorized to charge such fee to Deposit Account No. 18-1850.

Respectfully submitted,

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